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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DAVID R. MACINGA,
SARAH L. EDMONDS, KRISTIN E. HARTZELL,
KELLY A. DOBOS and CAROL A. QUEZADA

Appeal 2015-004224
Application 13/377,839[1]
Technology Center 1600

Before ERIC B. GRIMES, FRANCISCO C. PRATS, and
KRISTI L. R. SAWERT, *Administrative Patent Judges*.

PRATS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal under 35 U.S.C. § 134(a) involves claims to methods for skin sanitization. The Examiner rejected the claims for indefiniteness and obviousness.

We have jurisdiction under 35 U.S.C. § 6(b). We affirm the Examiner's rejection for indefiniteness. We also affirm the Examiner's obviousness rejections, except as to two claims.

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[1] Appellants identify the real party in interest as GOJO Industries, Inc. App. Br. 2.

STATEMENT OF THE CASE

The following rejections are before us for review:

(1) Claims 1–9 and 44–46, under 35 U.S.C. § 112, second paragraph, for indefiniteness (Ans. 2);

(2) Claims 1–6, 8, 9, 15–20, 22, 23, 41, and 43–46, under 35 U.S.C. § 103(a), for obviousness over Snyder[2] and Roeding[3] (Ans. 3–4); and

(3) Claims 7 and 21, under 35 U.S.C. § 103(a), for obviousness over Snyder, Roeding, and Policello[4] (Ans. 4–6).

Claims 1 and 41 illustrate the appealed subject matter and read as follows (App. Br. 21 (paragraphing added)):

1. A method for skin sanitization, the method comprising:

contacting the skin with foam formed from a foamable antimicrobial composition comprising

at least 50 wt. % of a C_{1-6} alcohol,

from about 0.02 to about 10 wt. % of a C_{6-10} alkane diol, based upon the total weight of the antimicrobial composition; and

a foaming surfactant selected from the group consisting of siloxane polymer surfactants and fluorosurfactants,

wherein the antimicrobial composition provides cumulative antimicrobial efficacy, when the antimicrobial composition is tested according to Federal Register 59 [116], Jun. 17, 1994: pp 31402-31452.

41. A method for surface sanitization, the method comprising:

contacting the surface with foam formed from a foamable antimicrobial composition comprising

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[2] US 2007/0184013 A1 (published Aug. 9, 2007).
[3] US 2007/0265352 A1 (published Nov 15, 2007).
[4] US 6,221,922 B1 (issued Apr. 24, 2001).

> at least 50 wt. % of a C_{1-6} alcohol,
> from about 0.02 to about 10 wt. % of 1,2-octane diol, and
> from about 0.002 to about 4 wt. % of a siloxane polymer surfactant, based upon the total weight of the antimicrobial composition,
> wherein the composition comprises from zero to about 0.1 wt. % of auxiliary antimicrobial agent.

In response to a species election requirement, Appellants elected skin as the species of sanitized surface, and 1,2-octane diol as the species of alkane diol. Final Action 2. Accordingly, as to the appealed obviousness rejections, we limit our analysis to the patentability of the elected species and the extent to which the rejected claims read on them. *See Ex parte Ohsaka*, 2 USPQ2d 1460, 1461 (BPAI 1987).

INDEFINITENESS

The Examiner's Position

The Examiner concludes that claim 1, and its dependent claims 2–9 and 44–46, are indefinite based on the recitation in claim 1 requiring the antimicrobial composition to be tested according to "Federal Register 59 [116], Jun. 17, 1994: pp 31402-31452." Ans. 2.

The Examiner contends that the claims must "stand alone to define the invention, and should not rely on the description, drawings, or extraneous material to give them meaning. Incorporation by express reference to the specification and/or drawings or extraneous material is not permitted except in very limited circumstances." *Id.* (citing *Ex parte Fressola,* 27 USPQ 2d 1608 (BPAI 1993)).

Analysis

> As stated in *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992):
>
> [T]he examiner bears the initial burden . . . of presenting a *prima facie* case of unpatentability. . . .
>
> After evidence or argument is submitted by the applicant in response, patentability is determined on the totality of the record, by a preponderance of evidence with due consideration to persuasiveness of argument.

Appellants contend that the "FDA TFM healthcare personnel hand wash test is well known in the art, and is defined by the Federal Register publication that is cited in Claim 1." App. Br. 7. Thus, Appellants contend, the "test requirements set forth in the cited publication are fixed in a permanent, tangible medium and are easily available to the public. Furthermore, this test has been described in detail in the patent application." *Id.* at 7–8 (citing Spec. ¶¶ 100–105); *see also* Reply Br. 4–7 (same argument).

Therefore, Appellants contend, by "rejecting the claims as indefinite, the [E]xaminer has failed to recognize federally established procedures that have been published in an official government publication and that are widely recognized by those of ordinary skill in the art. In so doing, the Examiner has deprived Applicant[s] of effectively claiming their invention." Reply Br. 7.

Appellants do not persuade us that a preponderance of the evidence fails to support the Examiner's conclusion of indefiniteness.

We first note that claim 1 does not recite the "FDA TFM healthcare personnel hand wash test," as Appellants contend. *See, e.g.*, App. Br. 7. Rather, the recitation at issue requires that "the antimicrobial composition

provides cumulative antimicrobial efficacy, when the antimicrobial composition is tested according to Federal Register 59 [116], Jun. 17, 1994: pp 31402–31452." App. Br. 21 (claim 1).

The portion of the Federal Register cited by Appellants' claim 1, which is approximately 50 pages long, was promulgated by the Food and Drug Administration and is entitled "Topical Antimicrobial Drug Products for Over-the-Counter Human Use; Tentative Final Monograph for HealthCare Antiseptic Drug Products" (hereinafter "FDA TFM"). FDA TFM, 59 Fed. Reg. 31402–31452 (June 17, 1994).

Rather than describing a single test, the FDA TFM recited in claim 1 includes multiple tests. First, the FDA TFM provides for *in vitro* testing of handwash compositions, which includes tests for antimicrobial spectrum, minimum inhibitory concentration, resistance development, and time kill studies. *Id.* at 31444.

The FDA TFM also provides for three different *in vivo* testing procedures: (1) a test method for evaluating "surgical hand scrub products," (2) a test method for evaluating "health-care antiseptic handwash or health-care personnel handwash drug products," and (3) a test method for evaluating "patient preoperative skin preparation drug products." *Id.* at 31445.

The procedures for testing surgical hand scrub products are set forth at pages 31445–31448 of the FDA TFM. The procedures for testing antiseptic handwashes or health-care personnel handwashes are set forth at pages 31448–31450 of the FDA TFM. The procedures for testing patient preoperative skin preparations are set forth at pages 31450–31452 of the FDA TFM.

Thus, rather than providing for a single test as Appellants assert, the FDA TFM cited in Appellants' claim 1 provides for multiple ways in which the claimed antimicrobial composition may be tested for cumulative antimicrobial efficacy. Claim 1, therefore, is amenable to multiple plausible interpretations, in that it encompasses testing according to as few as one of the tests described in the FDA TFM, or as many as all of the described tests.

Because claim 1 is amenable to multiple plausible interpretations, Appellants do not persuade us that the Examiner erred in concluding that claim 1 is indefinite. *See Ex parte Miyazaki*, 89 USPQ2d 1207, 1211 (BPAI 2008) (precedential) ("[I]f a claim is amenable to two or more plausible claim constructions, the USPTO is justified in requiring the applicant to more precisely define the metes and bounds of the claimed invention by holding the claim unpatentable under 35 U.S.C. § 112, second paragraph, as indefinite.").

We acknowledge that claim 1 must be given its broadest reasonable interpretation, viewed in light of Appellants' Specification. *See In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). Nonetheless, it is improper to confine the claims to a specific embodiment in the Specification when the claim itself does not limit the encompassed subject matter to that embodiment. *See In re Trans Texas Holdings Corp.*, 498 F.3d 1290, 1299 (Fed. Cir. 2007).

In the instant case, as noted above, claim 1 does not identify a specific test, but instead cites generally to the FDA TFM which, as discussed above, describes multiple tests. Thus, it would be improper to confine claim 1 to a specific test procedure described in Appellants' Specification. The Specification, moreover, does not resolve the ambiguity in claim 1, because

the Specification cites to both the "FDA TFM test for healthcare personnel hand wash" (Spec. ¶ 100) as well as the "FDA TFM surgical hand scrub test" (*id.* ¶ 106). As noted above, those are two distinct tests. *See* FDA TFM, 59 Fed. Reg. at 31444–31450.

In sum, for the reasons discussed, Appellants do not persuade us that the Examiner erred in concluding that claim 1 is indefinite. We, therefore, affirm the Examiner's rejection of that claim, and its dependent claims, under 35 U.S.C. § 112, second paragraph.

OBVIOUSNESS—SNYDER AND ROEDING

The Examiner's Position

In rejecting claims 1–6, 8, 9, 15–20, 22, 23, 41, and 43–46 for obviousness, the Examiner cites Snyder as describing a method of using an antimicrobial composition to sanitize skin, and notes in particular Snyder's disclosure that, in addition to the alcohol required by the rejected claims, Snyder also discloses that its composition suitably contains parabens. Ans. 3. The Examiner finds that Snyder differs from the rejected claims in that Snyder does not "explicitly disclose that the antimicrobial agent includes 1,2-octanediol." *Id.* at 4.

To address that deficiency, the Examiner cites Roeding as disclosing antimicrobial compositions, useful for contacting skin, in which the combination of a paraben and an alkane diol, such as 1,2-octane diol, provides synergistic antimicrobial action. *Id.* at 3–4.

Based on the references' combined teachings, the Examiner reasons:

> Since Roeding et al. disclose that compositions that combine 1,2-octanediol with antimicrobial agents like parabens exhibit synergistically intensified antimicrobial action; one of ordinary skill in the art would be motivated to incorporate 1,2-octanediol

> with parabens as an antimicrobial agent in the composition employed in the method of Snyder et al., with the reasonable expectation that the resulting method will successfully produce a synergistically intensified antimicrobial effect when applied to skin. Moreover, since the prior art discloses the claimed method steps using the claimed composition, it follows that the resulting outcome of the prior art method must also be a cumulative antimicrobial efficacy, with a log reduction of at least 3 after one wash, and at least 4 after ten washes.

Ans. 4

Analysis

Appellants do not persuade us that a preponderance of the evidence fails to support the Examiner's conclusion that the rejected claims would have been obvious. We select claim 1 as representative of the rejected claims. *See* 37 C.F.R. § 41.37(c)(iv).

As the Examiner finds, and as required by claim 1, Snyder discloses methods of sanitizing skin (*see* Snyder ¶ 21), using a composition containing at least 50 weight percent C_{1-6} alcohol (*see id.* ¶¶ 26–28), as well as a foaming siloxane polymer surfactant (*id.* ¶ 53).

As the Examiner finds, Snyder discloses that its compositions can contain 0.1 to 1 percent by weight of any of a variety of auxiliary antimicrobial agents, among them parabens. *Id.* ¶ 60.

Although Snyder does not appear to include 1,2-octanediol (the elected species of alkane diol) in its compositions, Roeding discloses that combining 1,2-octanediol with parabens synergistically improves the antimicrobial efficacy of compositions containing the combination:

> It was now particularly surprising that the mixtures according to the invention display a strongly synergistic efficacy and are distinctly superior to the individually metered preservatives potassium sorbate, *parabens* and iodopropynyl

> butylcarbamate or to a mixture of 1,2-hexanediol and 1,2-octanediol at the same concentration, particularly with regard to the germ-count reduction.

Roeding ¶ 27 (emphasis added). Roeding discloses that the amount of 1,2-octane diol may range from 0.1 to 10 percent by weight of its compositions, a concentration overlapping that of Appellants' claim 1. *See id.* ¶ 51.

We acknowledge Appellants' contention that Roeding's teachings are limited to preservatives, and do not contemplate skin sanitization. App. Br. 12–14; Reply Br. 7–8.

Contrary to Appellants' arguments, however, Roeding expressly contemplates applying its synergistic mixtures to skin for sanitizing purposes, and suggests combining its mixtures with other antimicrobial agents:

> The present invention relates . . . to appropriate processes for the cosmetic and/*or therapeutic treatment of germs*, in particular of (a) micro-organisms causing body odour, (b) micro-organisms causing acne and/or (c) micro-organisms causing mycoses, *comprising the topical application of an antimicrobially effective quantity of a mixture according to the invention, the proportions of said diols in the mixture preferably being adjusted in such a way that their antimicrobial effect is synergistically intensified.*
>
> . . .
>
> The mixtures according to the invention can be incorporated without difficulty into marketable cosmetic or dermatological formulations such as, inter alia, pump sprays, aerosol sprays, creams, ointments, tinctures, lotions, nail-care products (e.g. nail varnishes, nail-varnish removers, nail balms) and such like. *In this connection it is also possible, and in many cases advantageous, to combine the synergistic mixtures according to the invention with further active substances, for*

> *example with other antimicrobially, antimycotically or antivirally active substances.* In this connection the cosmetic and/or dermatological/keratological formulations containing the synergistic mixtures according to the invention may otherwise be composed as usual *and may serve for treating the skin* and/or the hair *along the lines of a dermatological treatment* or along the lines of a treatment within the field of grooming cosmetics.

Roeding ¶¶ 49, 68 (emphases added).

Thus, as seen above, Roeding discloses that its combination of 1,2-octanediol and parabens has a synergistic antimicrobial effect that renders it useful for skin application and combination with other antimicrobial formulations. As also seen above, Snyder discloses that its skin-sanitizing formulations may contain auxiliary antimicrobial agents, including parabens. Because an ordinary artisan, therefore, would have recognized that 1,2-octanediol would impart to Snyder's composition the synergistically potentiated antimicrobial effect taught in Roeding, we agree with the Examiner that an ordinary artisan had a good reason for, as well as a reasonable expectation of success in, including 1,2-octanediol in Snyder's formulation, thereby yielding a composition having the ingredients required by Appellants' claim 1, in amounts encompassed by claim 1.

Moreover, because the composition suggested by Snyder and Roeding includes the ingredients required by Appellants' claim 1, in amounts encompassed by the claim, we find that the Examiner has advanced a reasonable basis for concluding that the suggested composition also meets the functional recitation in claim 1 requiring the antimicrobial composition to provide cumulative antimicrobial efficacy when tested according to the FDA TFM. As our reviewing court's predecessor has explained, when the Office advances a reasonable basis for concluding that a functional property

recited in a claim at issue is present in a prior art product, the Office may require an applicant to demonstrate that the prior art product lacks the claimed functional property. *See In re Best*, 562 F.2d 1252, 1255 (CCPA 1977). As further explained in *Best*, whether the rejection at issue "is based on 'inherency' under 35 U.S.C. § 102, on 'prima facie obviousness' under 35 U.S.C. § 103, jointly or alternatively, the burden of proof is the same, and its fairness is evidenced by the PTO's inability to manufacture products or to obtain and compare prior art products." *Id.*

To that end, Appellants contend that an ordinary artisan lacked a reasonable expectation of achieving the cumulative efficacy required by claim 1, as evidenced by the fact that a number of preservative-containing commercial compositions, including one containing parabens, do not meet claim 1's cumulative efficacy limitation. App. Br. 14–16 (citing Macinga Decl.).[5] Although we acknowledge the experimental evidence advanced by Appellants, we note that none of the compared compositions contains the diols expressly disclosed by Roeding as imparting to skin-treating compositions the synergistically potentiated antimicrobial properties discussed above. Thus, that compositions lacking 1,2-octanediol did not provide the cumulative efficacy recited in claim 1 does not persuade us that the cited prior art failed to suggest compositions meeting that limitation, given the prior art's disclosure that 1,2-octanediol-containing compositions have significantly improved antimicrobial properties.

In sum, for the reasons discussed, Appellants do not persuade us that the evidence of record fails to support the Examiner's prima facie case of

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[5] Declaration of David R. Macinga, Ph.D., dated August 27, 2013.

obviousness as to claim 1. We are also unpersuaded, moreover, that Appellants have advanced evidence of unexpected results sufficient to outweigh the evidence of prima facie obviousness.

As to Appellants' contentions regarding unexpected results, we acknowledge the comparison between the compositions of Appellants' inventive Examples 2 and 3, both of which contain 0.5 weight percent 1,2-octanediol, and Example 1, which is identical to Example 2 except that Example 1 lacks 1,2-octanediol. Spec. ¶ 125.

We acknowledge also that, in the hand wash scrub test, the 1,2-octanediol-lacking composition of Example 1 achieved a mean $\log_{10}$ reduction of 4.26 after Wash 1, but only a 3.56 log reduction after Wash 10. *Id.* ¶ 127 (Table 3). In contrast, the 1,2-octanediol-containing compositions of Example 2 (log reduction after Wash 1 = 4.29, after Wash 10 = 4.75) and Example 3 (log reduction after Wash 1 = 4.46, after Wash 10 = 4.92) both improved their efficacy after subsequent washes, thus meeting claim 1's requirement for cumulative efficacy.[6] *Id.*

As discussed above, however, Roeding discloses expressly that 1,2-octanediol imparts significant antimicrobial activity to compositions suitable for skin treatment. Thus, because Roeding discloses that 1,2-octanediol imparts significant antibacterial activity to skin-treating compositions, Appellants do not persuade us that the improvement in properties over a composition lacking 1,2-octanediol would have been

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[6] Although not an express definition of "cumulative antimicrobial efficacy," the Specification states that "the enhanced composition unexpectedly provides cumulative activity, *i.e. the efficacy of the enhanced composition increases with multiple uses.*" Spec. ¶ 105 (emphasis added).

unexpected. In that regard we note, moreover, that Appellants' Example 4, a commercially available liquid formulation that contained about 63 percent by volume isopropanol, marketed by Steris Corporation under the trademark CalStat®, also exhibited cumulative efficacy (log reduction after Wash 1 = 4.44, after Wash 10 = 4.97). Spec. ¶¶ 125–127. Thus, Appellants do not persuade us that cumulative efficacy, by itself, is an unexpected property.

Further, because Roeding discloses that 1,2-octanediol imparts significant antibacterial activity to skin-treating compositions, we are not persuaded that Appellants have explained adequately why the comparison of Examples 1, 2, and 3 from the Specification equates to a comparison to the closest prior art. *See In re Baxter-Travenol Labs.*, 952 F.2d 388, 392 (Fed. Cir. 1991) ("[W]hen unexpected results are used as evidence of nonobviousness, the results must be shown to be unexpected compared with the closest prior art.").

In addition, representative claim 1 encompasses broad concentration ranges for both the alcohol (at least 50 wt. %) and alkane diol (0.02 to about 10 wt. %). App. Br. 21. In contrast, Appellants' Examples 2 and 3 contain only a single 1,2-alkanediol concentration (0.5 wt. %), and contain significantly less alcohol than the maximum amount encompassed by claim 1 (Example 2 = 70 wt. % ethanol; Example 3 = 62 wt. %). Spec. ¶ 125. Appellants do not persuade us, therefore, that the evidence advanced to show unexpected results is commensurate in scope with the claimed subject matter. *See In re Peterson*, 315 F.3d 1325, 1330 (Fed. Cir. 2003) ("[A]pplicant's showing of unexpected results must be commensurate in scope with the claimed range.").

In sum, for reasons discussed above, Appellants do not persuade us that the evidence of record fails to support the Examiner's prima facie case of obviousness as to claim 1. For the reasons discussed above, we are also unpersuaded that Appellants have advanced evidence of unexpected results sufficient to outweigh the evidence of prima facie obviousness as to claim 1.

Because the preponderance of evidence, therefore, supports the Examiner's conclusion that the method of claim 1 would have been obvious to an ordinary artisan in view of Snyder and Roeding, we affirm the Examiner' rejection of claim 1 over those references. Because they were not argued separately, claims 2–6, 8, and 9 fall with claim 1. 37 C.F.R. § 41.37(c)(iv).

As to claim 15, Appellants advance the same arguments as those discussed above in relation to claim 1. App. Br. 16–17. Accordingly, for the reasons discussed above, we affirm the Examiner's rejection of claim 15 over Snyder and Roeding. Claims 16–20, 22, and 23, all dependent directly or ultimately from claim 15, fall with claim 15. *See* 37 C.F.R. § 41.37(c)(iv).

As to claim 41, we acknowledge the limitation that the composition recited therein "comprises from zero to about 0.1 wt. % of auxiliary antimicrobial agent." App. Br. 25. We acknowledge also Roeding's disclosure that the synergistic antimicrobial properties of the compositions taught therein rely on combining the alkane diols with other preservatives, such as parabens. *See* Roeding ¶ 27. Nonetheless, because the up to 0.1 weight percent encompassed by claim 41 overlaps the suitable range of paraben concentrations in Roeding (up to 0.4 % (*id.* ¶ 56)), Appellants do not persuade us that the cited references fail to suggest the methods recited

in claim 41. We, therefore, also affirm the Examiner's rejection as to claim 41.

Claims 43 and 46, which depend from claims 41 and 1, respectively, recite that "the composition is devoid of auxiliary antimicrobial agents." App. Br. 25, 26. Claims 43 and 46, therefore, exclude the presence of any antimicrobial ingredient, including Roeding's parabens, beyond those recited in claims 1 and 41.

Because Roeding teaches that its synergistic antimicrobial effect is derived from combining 1,2-octanediol with other preservative agents (*see, e.g.*, Roeding ¶ 27), we are not persuaded that the cited references would have suggested a process meeting all of the requirements of claims 43 and 46. In particular, the Examiner does not persuade us (*see* Ans. 10–11), that an ordinary artisan would have extrapolated the teachings of Roeding and Snyder as suggesting that 1,2-octanediol, by itself, would provide the synergistic effect described in Roeding. We, therefore, reverse the Examiner's obviousness rejection of claims 43 and 46 over Snyder and Roeding.

Claim 44 recites "[t]he method of claim 1, wherein the tested antimicrobial composition provides a log10 reduction of at least 2 after one wash, and at least 3 after ten washes." App. Br. 26. Appellants aver that claim 44 is patentable over Snyder and Roeding separately from claim 1. *See id.* at 17. Appellants do not, however, present any specific argument as to claim 44 in their Appeal Brief. *See id.*

Appellants also contend that claim 44 recites an unexpected result. *See* Reply Br. 9. The composition of Appellants' Example 1, however, which does not include the inventive 1,2-octanediol potentiating ingredient

(*see* Spec. ¶ 125), meets claim 44's requirement for a log10 reduction of at least 2 after one wash, and at least 3 after ten washes. *See id.* ¶ 127 (Table 3). Because Appellants do not persuade us, therefore, that claim 44's process would have been unobvious over that suggested by Snyder and Roeding, we affirm the Examiner's rejection of that claim over those references.

Claim 45 recites "[t]he method of claim 1, wherein the tested antimicrobial composition provides a log10 reduction of at least 3 after one wash, and at least 4 after ten washes." App. Br. 26. Although Appellants do not advance any specific argument as to claim 45 in the Appeal Brief, Appellants contend, in response to argument presented in the Examiner, that claim 45 recites an unexpected result. Reply Br. 9.

As seen in Appellants' Specification, however, the commercial product tested alongside the invention achieves the log reductions required by claim 45. *See* Spec. ¶ 127 (Table 3). Moreover, as discussed above, the process recited in claim 1, from which claim 45 depends, is not commensurate in scope with the evidence advanced by Appellants to show unexpected results. Because Appellants do not persuade us, therefore, that claim 45's process would have been unobvious over that suggested by Snyder and Roeding, we affirm the Examiner's rejection of that claim over those references.

OBVIOUSNESS—
SNYDER, ROEDING, AND POLICELLO

Claim 7 depends from claim 1, discussed above, and claim 21 depends ultimately from claim 15, also discussed above. *See* App. Br. 22, 23. In rejecting claims 7 and 21 for obviousness, the Examiner relied on the teachings in Snyder and Roeding, discussed above, and cited Policello as

evidence that it would have been obvious to use the specific siloxane polymer surfactant recited in claims 7 and 21 in the method suggested by Snyder and Roeding. Ans. 5–6.

Appellants do not persuade us that the Examiner failed to make out a prima facie case of obviousness as to claims 7 and 21. To the extent Appellants rely on their previous arguments as to claims 1 and 15 (*see* App. Br. 19), we do not find those arguments persuasive for the reasons discussed above.

In addition, Appellants argue, an ordinary artisan would not have been motivated to combine Policello with Snyder and Roeding because "Policello relates to foam control agents, and does not relate to alcoholic skin sanitizers. Foam control agents, rather than operating to create foam, are used to control or reduce foam." App. Br. 19.

We do not find this argument persuasive. As the Examiner finds, Policello discloses that a siloxane polymer surfactant, undisputedly encompassed by claims 7 and 21, "gives improved foam control as well as superspreading properties in aqueous systems." Policello, 1:57–58. As Policello explains "[o]ne of the most common deficiencies with high performance wetting agents comprised of alkoxylated organosilicone surfactants is that foam generated from these products is difficult to control." *Id.* at 1:5–8.

Appellants do not persuade us, therefore, that the Examiner erred in concluding that it would have been obvious to use Policello's foam control agent in Snyder's composition, given Snyder's disclosure, discussed above, of the suitability of including a foaming siloxane polymer surfactant in its

compositions. *See* Snyder ¶ 53. We, therefore also affirm the Examiner's rejection of claims 7 and 21 over Snyder, Roeding, and Policello.

SUMMARY

For the reasons discussed, we affirm the Examiner's rejection of claims 1–9 and 44–46, under 35 U.S.C. § 112, second paragraph, for indefiniteness.

For the reasons discussed, we affirm the Examiner's rejection of claims 1–6, 8, 9, 15–20, 22, 23, 41, 44, and 45, under 35 U.S.C. § 103(a), for obviousness over Snyder and Roeding.

For the reasons discussed, however, we reverse the Examiner's rejection of claims 43 and 46 for obviousness over Snyder and Roeding.

For the reasons discussed, we affirm the Examiner's rejection of claims 7 and 21, under 35 U.S.C. § 103(a), for obviousness over Snyder, Roeding, and Policello.

TIME PERIOD

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED-IN-PART